

Gas Sensor ME 1250

Ozone O₃



O₃

Gas	Ozone
Formula	O ₃
CAS number	10028-15-16
Max. workplace concentration	100 ppb
Relative density	1.66 ▼
Appearance	Colorless Mostly odorless
Hazards	Toxic Difficulty breathing

- **Automatic zero point calibration**
- **Active noise reduction on the output signal**
- **Linear measurement signal depending on the gas concentration**
- **High response sensitivity with a short response time**
- **Selective and reliable measurement with stable measuring signal and zero point**
- **Temperature compensated measurement**
- **Long service life**


The ME1250 Gas Sensor is a remote measuring unit for monitoring gas concentration and is used for workplace safety and/or as a leak detector.

The microprocessor-controlled electronics of the sensor, adapted to the specific properties of the measuring cell, enable fast and reliable signal processing. The measured gas concentration is transmitted to a Gas Control Panel, which can manage a large number of distributed gas sensors.

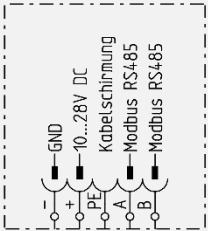
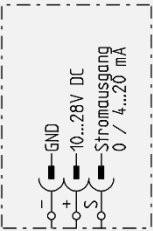
Thanks to bus communication, only one cable is required, which can be continued from sensor to sensor. The ME 1250 Gas Sensor is also available with an analogue output signal of 4...20 mA. The measured gas concentration can thereby be processed by other PLC (Programmable Logic Controllers).

The optional relay module expands the ME 1250 Gas Sensor internally with 3 relays for direct switching of signal transmitters without the use of a control panel.

■ Technical Specifications

Measurement method	Electrochemical	
Measuring range	0...1,000 ppb	other measuring ranges on request
Alarm thresholds	Alarm 1: 300 ppb Alarm 2: 500 ppb	recommendation
Lifespan in air	up to 2 years	according to cell manufacturer
Break-in period	12 h	according to cell manufacturer
Response time t_{80}	< 60 sec	
Operating voltage	10...28 VDC	nominal 24 VDC
Ambient temperature	-40...+50 °C	
Humidity	15...90% rF	non-condensing
Mounting height	30 cm above floor	heavier than air ▼
Casing	<i>Default:</i> Powder-coated aluminum Orange RAL 2004 80 x 125 x 59 mm 500 g	<i>Optional:</i> ABS plastic Light gray RAL 7035 81 x 121 x 56 mm 250 g
Cable entry	M20	
EU conformity	CE mark including EMC test	

■ Versions

Article code	12BUS-03-10	1250-03-10
Description	ME 1250 Bus	ME 1250 Analogue
Output signal	Bus communication with Control Panel	Analogue 4...20 mA Load max. 800 Ω at 24V input
Connection	4-core cable U72M 1x4x0.6 mm Shielded	3-core cable U72M 1x4x0.6 mm or CY 0.5 mm ² Shielded
		
Topology	Bus, tree or star topology	Star topology
Power	< 0.15 W	< 0.8 W

■ Cross sensitivity

Due to the electrochemical measurement principle, the measurement is more selective than other measurement methods. The cross-sensitivity table can be found in the [online version of this data sheet](#).

■ Accessories

Article code	
1250-REL	Relay module for single sensor
1250-AIR-BOX	Add-on box for ventilation duct
1250-AIR-FLOW	Hose fitting
1250-SUP	Mounting plate for round columns
1250-SCHUTZ	Weather protection

■ Maintenance

Annual calibration and function check with calibration gas, carried out by trained staff.

■ Consumables

Article code	
CELL-03-C5	Measuring cell for ozone Lifespan: up to 2 years

- Exposure above 1,000 ppb requires recalibration
- Exposure above 50,000 ppb can destroy the measuring cell